

WHAT IS CLAIMED IS:

1. An inverted-F metal plate antenna fixed on a ground conductor surface, comprising:

5 a radiating conductor plate disposed opposing and substantially in parallel with the ground conductor surface;

a power-feeding conductor plate extending substantially perpendicularly from an outer edge of the radiating conductor plate and connected to a power-feeding circuit; and

10 a plurality of shorted conductor plates extending substantially perpendicularly from a plurality of points on outer edges of the radiating conductor plate and connected to the ground conductor surface;

wherein the plurality of shorted conductor plates are
15 disposed such that when power is supplied, a plurality of resonance modes with different resonant lengths is generated respectively in association with the plurality of shorted conductor plates.

20 2. An inverted-F metal plate antenna according to Claim 1, wherein the plurality of shorted conductor plates is disposed at different distances from the power-feeding conductor plate.